

Epidermoid cyst of the spleen

Verma M, Vashist M G, Dalal S, Chanchal, Singla A

ABSTRACT

Splenic cysts are not frequently encountered in everyday surgical practice. They are either parasitic (usually hydatid cysts) or non parasitic (true cysts with epithelial lining or more commonly false cysts). We report the case of a patient with a palpable mass and abdominal pain in the left upper quadrant. USG and CECT abdomen revealed it to be a large splenic cyst. Histopathological examination confirmed it as an epidermoid cyst and splenectomy was done.

Keywords: splenic cyst, splenomegaly, splenectomy

INTRODUCTION

Splenic cyst can be parasitic (hydatid) or nonparasitic. Primary nonparasitic splenic cysts (PNSC) are rare and account for 10% of all nonparasitic splenic cysts, but they are the most frequent type of splenic cysts in children. They are classified as primary (true epithelial), lined by an epithelial cover (epidermoid, dermoid and mesothelial) or endothelial cover (hemangioma, lymphangioma) and secondary (pseudocysts, non-epithelial), which are usually of post-traumatic origin.¹ Though the cysts are asymptomatic, except for pain due to mass effect in the abdomen. It can get infected or rupture causing acute abdomen.

CASE REPORT

A 31-year-old man presented with history of abdominal discomfort and fullness in his left upper abdomen since ten months. Physical examination revealed a large, smooth, nontender mass occupying the left hypochondrium. The routine hematological and biochemical tests were normal. Serologic tests were negative for parasitic infection. USG and CT abdomen showed a well defined splenic cyst of size 16 x 14 cm, displacing the stomach to the right (Fig 1).

The diagnosis of a splenic cyst was confirmed and the exploratory laparotomy was scheduled in two weeks. On exploration, a very large cyst of the spleen occupying the entire left upper abdomen was found. The large size and little splenic

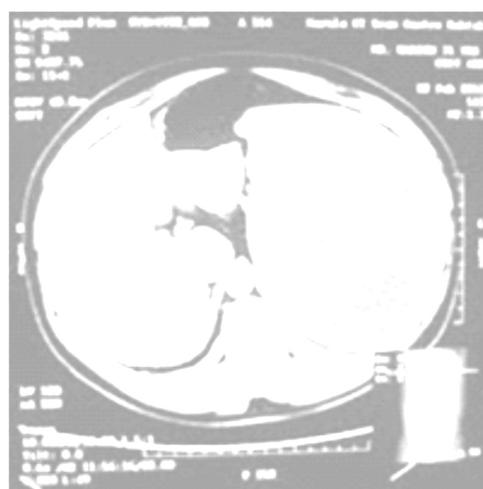


Fig.1: CT abdomen showing hypoechoic cyst of spleen parenchyma made preservation of the spleen impossible. The splenectomy was performed and sent for histopathological examination. The excised organ measured 26 X 18 X 16 cm and weighed 750gms with intact surface. The cyst was unilocular and contained about 550ml of yellowish brown granular fluid.

The inner surface was yellowish to whitish glistening with marked trabeculations and normal appearing adjacent splenic parenchyma of size 8 x 3 cm. Histology revealed picture of a true cyst composed of a wall lined by both squamous and mesothelial cubic epithelia, consistent with the diagnosis of an epidermoid cyst of the spleen. (Fig 2) The postoperative course was uneventful and the patient was discharged 5 days after the operation.

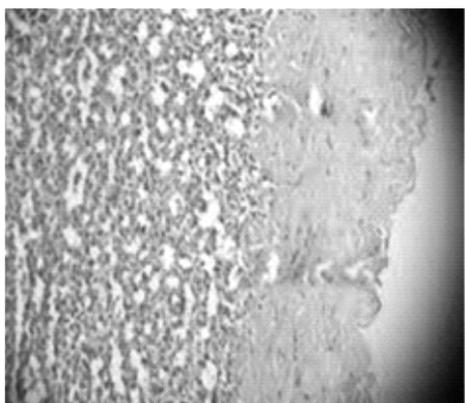


Fig.2: Microscopic examination of splenic epidermoid cyst.

DISCUSSION

Andral G was credited for first to report a splenic cyst at autopsy.² Majority of splenic cysts are parasitic and are due to *Echinococcus granulosus* infestation particularly in endemic areas.³ Martin offered a simplified clinical classification where in hemangioma was the most common primary cyst and dermoid was the rarest. Nonparasitic splenic cysts may be completely asymptomatic or may present with acute abdominal symptoms due to displacement of surrounding structures by the enlarging splenic mass. Gradual enlargement may be due to the proliferation and the secretions of the lining cells or to the bleeding from the cystic wall, as well as to an osmotic imbalance of the cystic fluid.⁴

USG, CT and MRI provide most of the necessary information about the morphology of the cyst, the composition of the cystic fluid and their location in the spleen, the position of the cyst and its relationship with the surrounding tissues.^{5,6} Earlier, the classical approach to splenic cysts has been open complete splenectomy but today the options have changed to partial splenectomy, marsupialization, or cyst decapsulation (unroofing), accessed either by open laparotomy or laparoscopy.⁷ Partial splenectomy is recommended, if the cyst is located in the poles of the spleen.

Present case serves to highlight that though splenic epidermoid cyst is an infrequent entity, it should be considered in the differential diagnosis of a splenic cystic mass. An attempt should be made to preserve the spleen provided there is adequate parenchyma, otherwise splenectomy is the rule.

AUTHOR NOTE

Manish Verma, Assistant Professor,
E-mail : manish.verma426@gmail.com
(Corresponding Author)

M. G. Vashist, Senior Professor

Satish Dalal, Professor

Chanchal, Junior Resident

Amit Singla, Junior Resident

Department of General Surgery, Pt. B. D. Sharma
Postgraduate Institute of Medical Sciences,
Rohtak

REFERENCES

1. Reddi VR, Reddy MK, Srinivas B, Sekhar CC, Ramesh O. Mesothelial splenic cyst--a case report. *Ann Acad Med Singapore*. 1998 Nov;27(6):880-2.
2. Andral G. *Precis d'anatomie patliologique*. Paris : Gabon, 1829 ; 2: 432
3. Higaki K, Jimi A, Watanabe J, Kusaba A, Kojiro M. Epidermoid cyst of the spleen with CA19-9 or carcinoembryonic antigen productions: report of three cases. *Am J Surg Pathol*. 1998 Jun;22(6):704-8.
4. Morgenstern L. Nonparasitic splenic cysts: pathogenesis, classification, and treatment. *J Am Coll Surg*. 2002 Mar;194(3):306-14.
5. Robertson F, Leander P, Ekberg O. Radiology of the spleen. *Eur Radiol*. 2001;11(1):80-95.
6. Labruzzo C, Haritopoulos KN, El Tayar AR, Hakim NS. Posttraumatic cyst of the spleen: a case report and review of the literature. *Int Surg*. 2002 Jul-Sep;87(3):152-6.
7. Till H, Schaarschmidt K. Partial laparoscopic decapsulation of congenital splenic cysts. A medium-term evaluation proves the efficiency in children. *Surg Endosc*. 2004 Apr;18(4):626-8.